

AMENDMENTS TO THE CLAIMS:

With the entry of this Amendment, the status of the claims in this application is as follows:

Claims 1-8 (canceled)

Claims 9 and 10 (withdrawn)

Claim 11 (currently amended): A static mixer comprising:
precision cast static mixer elements (1) arranged along a central axis (10),
each precision cast static mixer element having a circumferential reinforcement region
(4);

intermediate elements (2) abutting the circumferential reinforcement
region (4) and forming in combination with the precision cast static mixer elements a
static mixer body of a preselected length with a periphery defined by the reinforcement
region and the intermediate elements; and

joints between the reinforcement region (4) and the intermediate elements
(2) defining first and second continuous joint surfaces (40a, 40b and 20a, 20b) and
mutually defining a seal formed between the first and second continuous joint surfaces
between the reinforcement regions (4) and the intermediate elements (2);

~~one continuous joint surface including a cut-out;~~

a first continuous joint surface defining at least one cut-out having an
upwardly extending cavity;

~~the other~~ a second continuous joint surface including supporting a
protrusion for extending into the at least one cut-outs out of the first continuous joint
surface for positioning the reinforcement region and the intermediate elements at the seal
of the first and second continuous joint surfaces with respect to each other;

the first continuous joint surface including defining the at least one cut-out
providing having an upwardly extending sealing cavity of sufficient dimension for
receiving the protrusion supported on the second continuous surface without obstruction

within the cavity while permitting the first and second continuous joint surfaces to define the seal,

whereby the first continuous joint surface defines an unobstructed by a protrusion planar surface to enable machining access for adjusting the length of the static mixer.

Claim 12 (currently amended): The static mixer of claim 11 wherein:
the reinforcement regions (4) of the precision cast static mixer elements (1) are ring-shaped; ~~and including~~
the reinforcement regions (4) have the first continuous joint surface defining cut-outs (41, 41', 42, 42') configured in the reinforcement regions (4); and
~~a projecting part~~ the second continuous joint surface supports the protrusion (21, 21', 22, 22', 23) protruding from at least one of the continuous joint locations (20a, 20b) of at least one intermediate element (2), the projecting part having a shape complementary to a shape of the cut-outs.

Claim 13 (currently amended): The static mixer of claim 12 wherein:
at least some of the ~~projecting parts (23)~~ protrusions are separate parts (23) fitted into cut-outs (25) in the intermediate elements (2).

Claim 14 (previously added): The static mixer of claim 11 further including:
a longitudinally slit cylinder (5) of resiliently elastic sheet metal lamina holding the precision cast static mixer elements (1) at the reinforcement region (4) and the intermediate element (2) together.

Claim 15 (previously added): The static mixer of claim 11 and wherein:
the precision cast static mixer elements (1) each comprise a gridwork (3) of webs (31) which are arranged in layers oriented parallel to the central axis (10) with the webs of adjacent layers crossing one another.

Claim 16 (previously added): The static mixer of claim 15 and wherein:

the webs of adjacent layers cross one another and enclose angles between 10° and 70°.

Claim 17 (previously added): The static mixer of claim 11 and wherein: the precision cast static mixer elements (1) are manufactured from the group consisting of a metallic alloy, a ceramic material, and a plastic.

Claim 18 (previously added): The static mixer of claim 15 and wherein: the gridwork (3) of webs (31) is co-cast with the reinforcement regions (4).

Claim 19 (previously added): The static mixer of claim 12 wherein: first cut-outs (41, 41') are configured on one side of the reinforcement regions (4); and

second cut-outs (42, 42') are configured on the other side of the reinforcement regions (4) and displaced 90° from the first cut-outs (41, 41').